ABSTRACT OF THE DISCLOSURE

A transmission device (1) transmits an alternating magnetic field to a receiver (3) implanted in a human's body to supply energy drawn from the alternating magnetic field to an energy consuming implant in the human's body. The transmission device comprises a coil (6) adapted to generate the alternating magnetic field in a desired direction towards the implanted receiver. A shield (7) shields an operator's hand (2) from the alternating magnetic field generated by the coil. The shield includes a magnetizable core (8) extending in the coil (6) and a magnetizable casing (9) integrated with the core and surrounding the rear end of the coil and the circumference of the coil along at least a portion of the longitudinal extension of the coil.